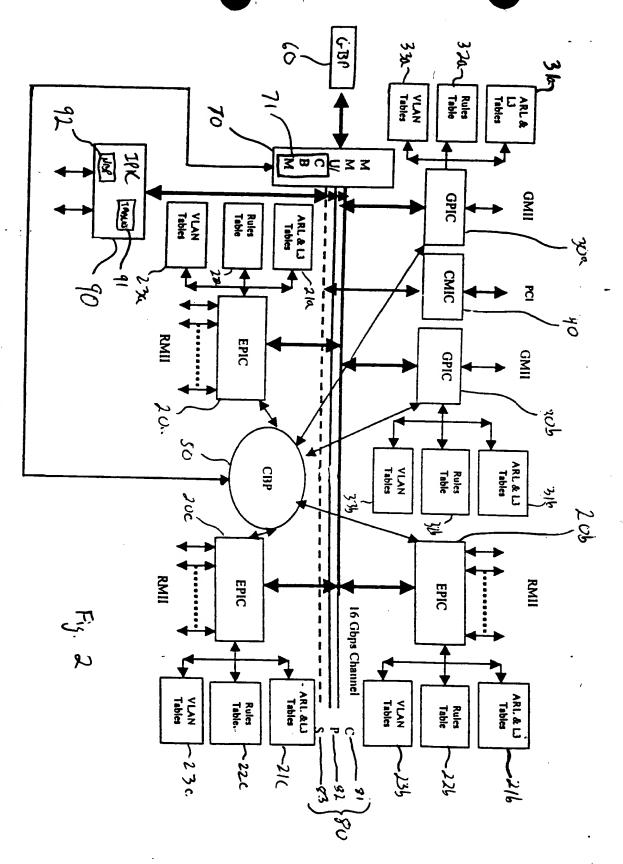


Fig. 1



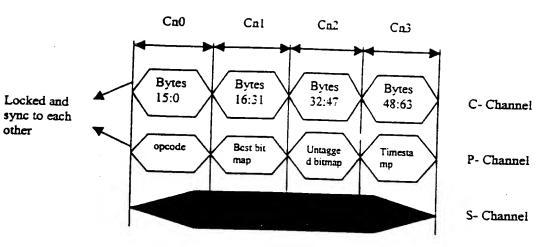


Fig. 3

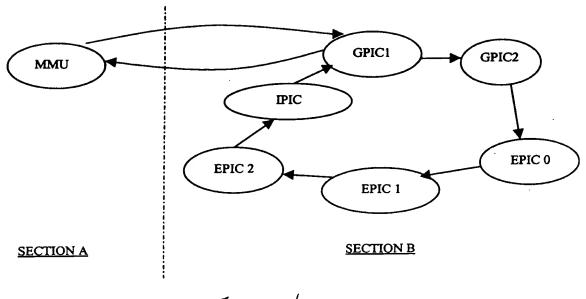
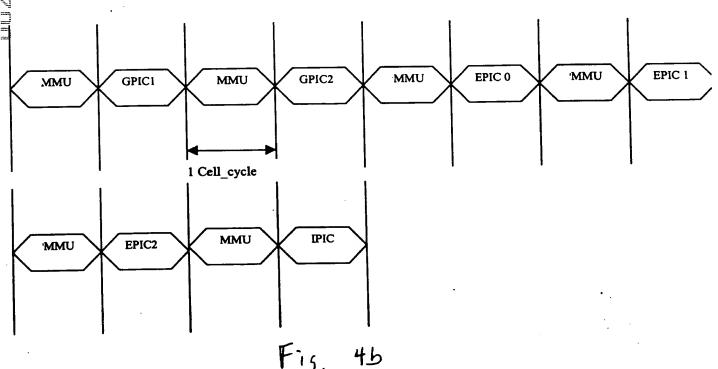


Fig. 4a



Protocol Channel Messages

30	28	26	24	22	20	18	16	14	12	10	8	6	4	2	0
Opc ode	Ip IPX	Rese rved	Nxt cell	Src	Dest	Port	Co	s J	S	E Cr	 	0		Len	<u> </u>
													-		
62	60	58	56	54	52	50	48	46	44	42	40	38	36	34	32
L						Mo	dule l	d Bit	map						
										-					_
30	28	26	24	22	20	18	16	14	12	10	8	6	4	2	0
R						Bo	c/Mc	Portb	itmap						
62	60	58	56	54	52	50	48	46	44	42	40	38	36	34	32
PF			N	ew IP c	hecksu	ım			M	MT-M	odId	T	TGID	Mod	- -
M									<u> </u>					орсо	de
30	28	26	24	22	20	18	16	14	12	10	8	6	4	2	
\overline{U}	20	20		Untag									J. 		0
				Ontag	gcu i	OITOIL	пар /	SIC I	OIT IN	unoci	(DITO.)			
62	60	58	56	54	52	50	48	46	44	42	40	38	36	34	32
Rs	vd	Matc	hed	•	•	Vla	n Id			5	rc Po	rt	Rei	mote I	Port
1	ŀ	Filt	er												
				•					-	1			1		
30	28	26	24	22	20	18	16	14	12	10	8	6	4	2	0
			CPU	J Opco	des						Tir	neSta	mp		
62	60	58	56	54	52	50	48	46	44	42	40	38	36	34	32
R	L3 Port Bitmap														

Fry. 5

Side Band Channel Messages

30	28	26	24	22	20	18	16	14	12	10	8	6	4	2	0
	Opcod	le	De	est Poestinat Dev I	ion		Src Po	ort		Data	Len]	EC ode	Cos	C
							Ad	dress							
							D	ata		-					
									4						

Layer Seven- Application
Loyer Six Presentation
Layer five- Session
Loyer four- Transport
Layer three- Network
Layer two. Duta link
Layer one- Physical

Figure 7 Prior Art 4

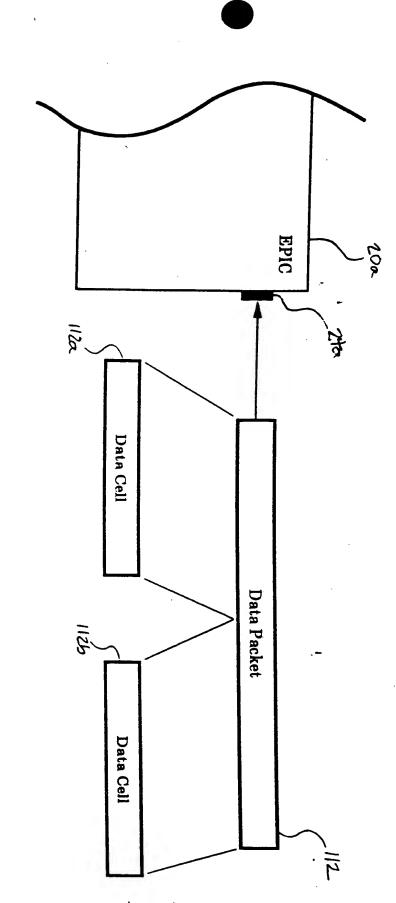


Fig. /

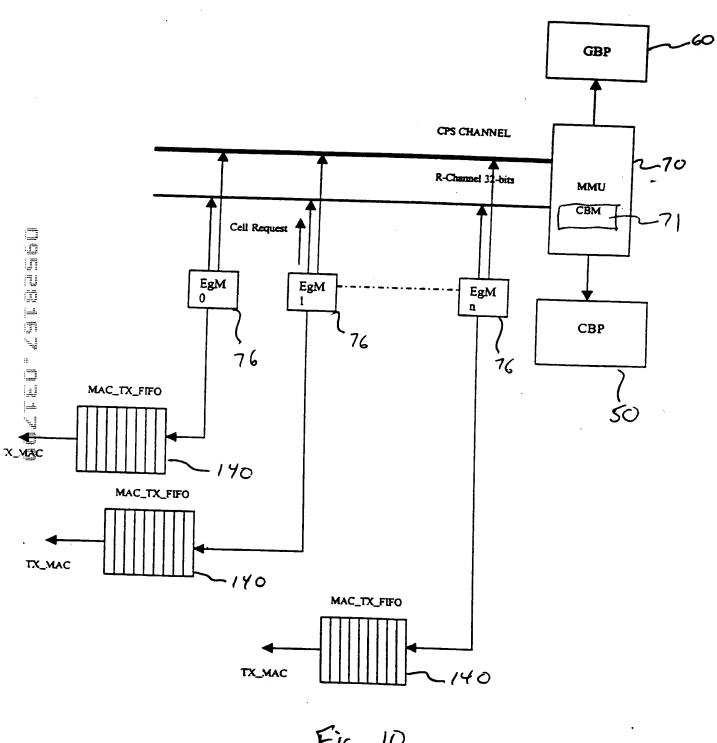


Fig. 10

Line 0	FC LC BC/MC Cpy_cnt(5b) Cell_length (7b) CRC (2b) NC_header (16b) Src Count(6) IPX IP Time_Stamp (14b) O bits(2b) P NextCellLen(2b) CpuOpcode(4b) Cell_data (0-9B)
Line 2	Cell_data (10-27) Bytes
Line 3	Cell_data (28-45) Bytes
	Cell_data (46-63) Bytes

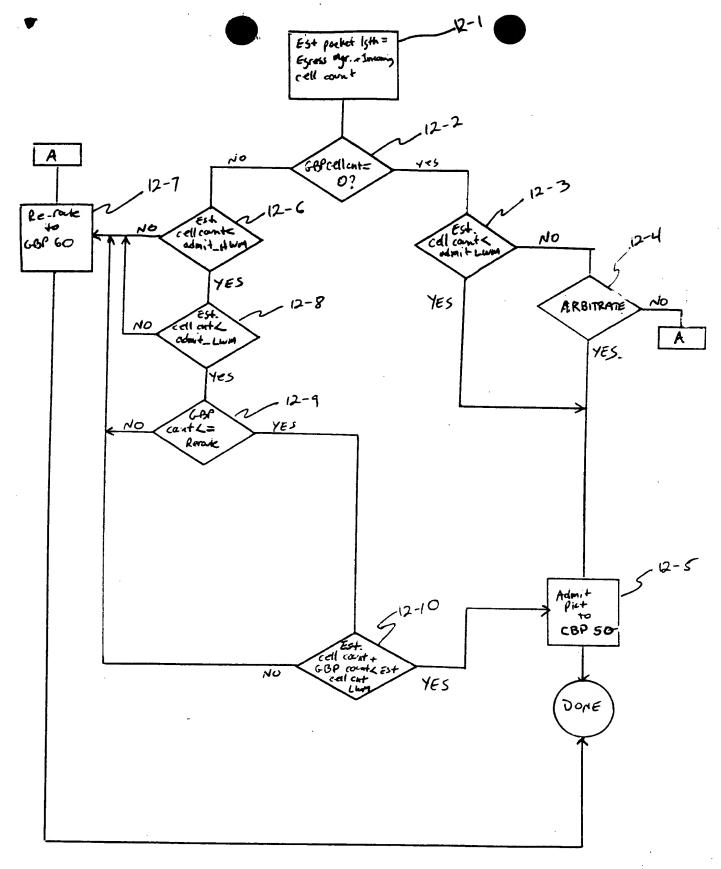


Fig. 12

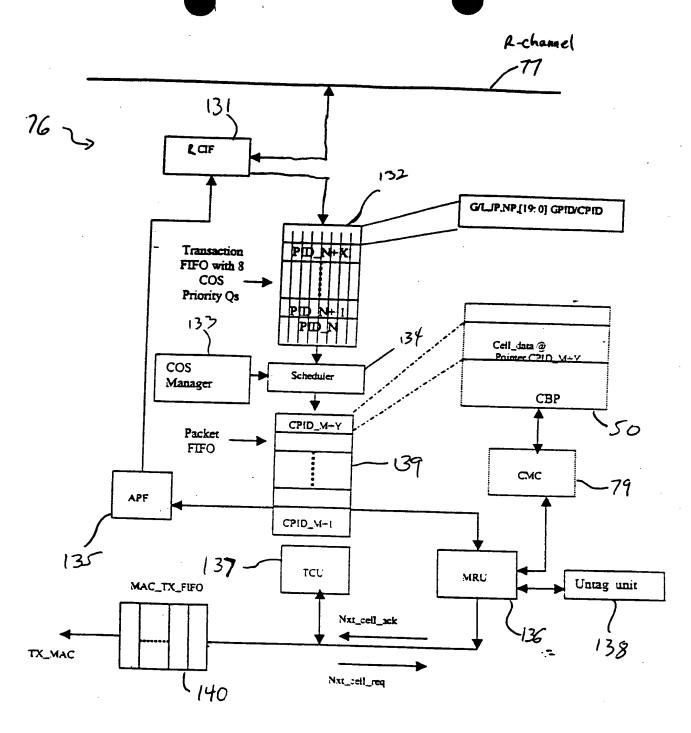
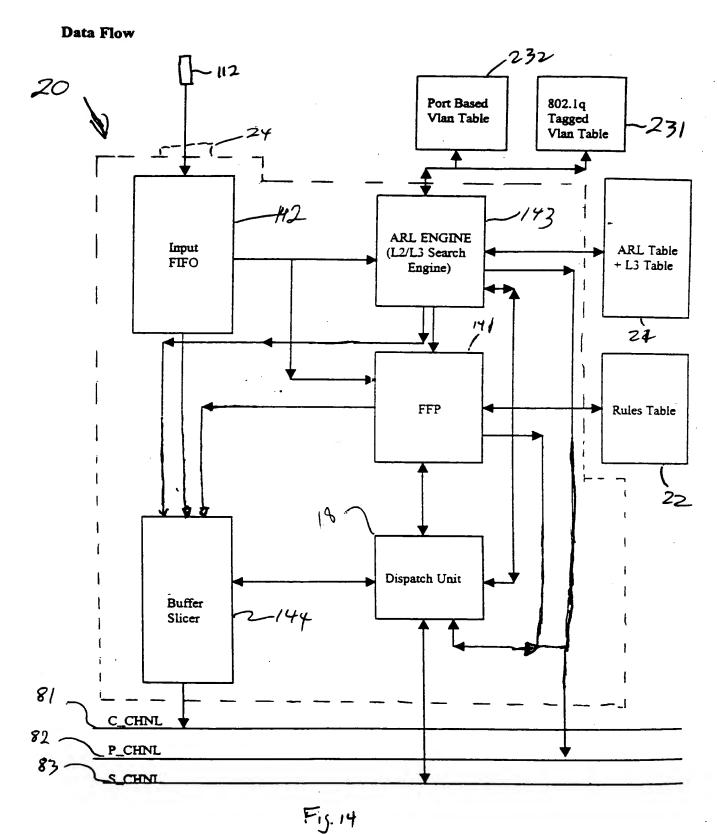
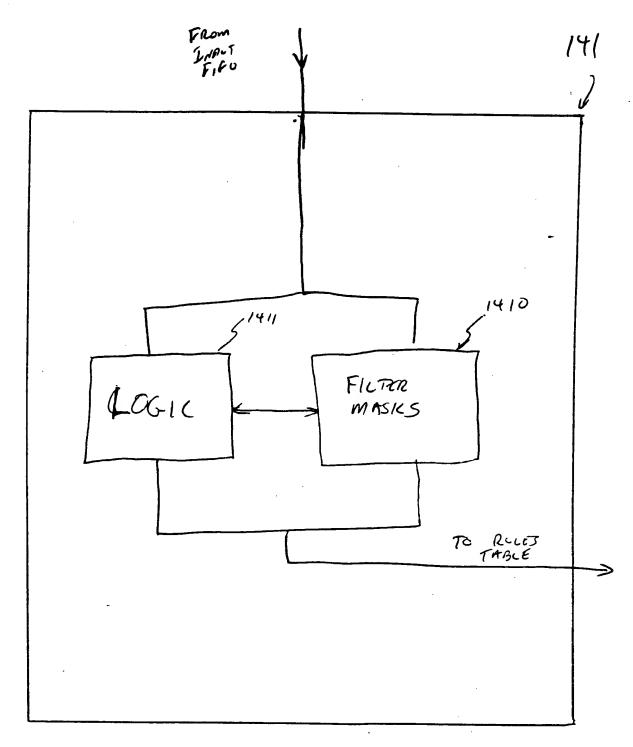


Fig 13

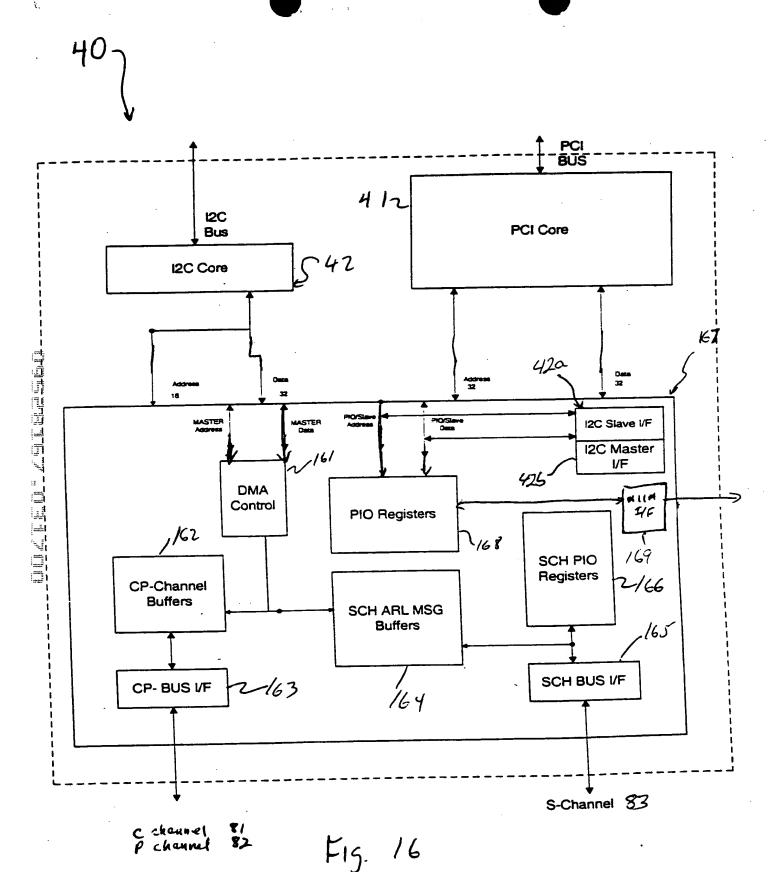
e,... .





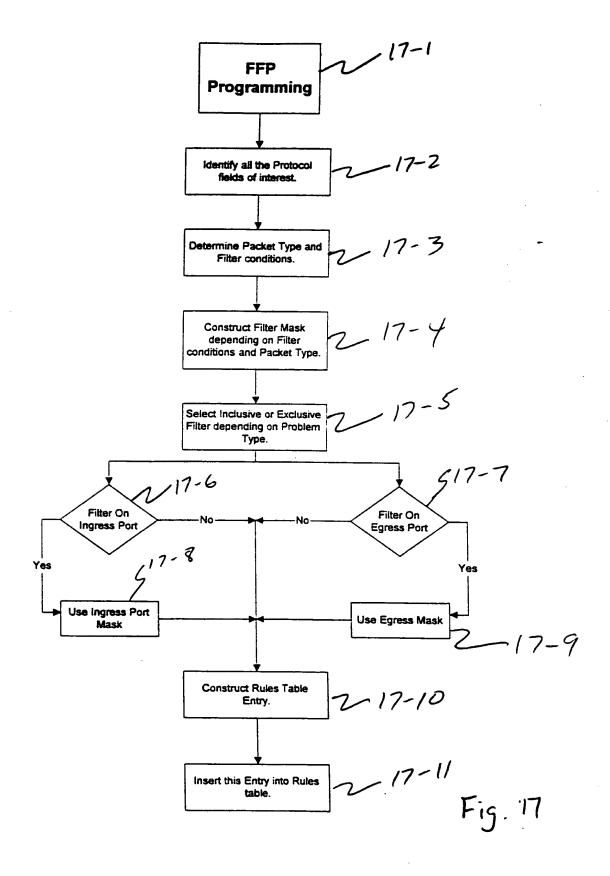
F16. 15

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FFP Programming Flow Chart



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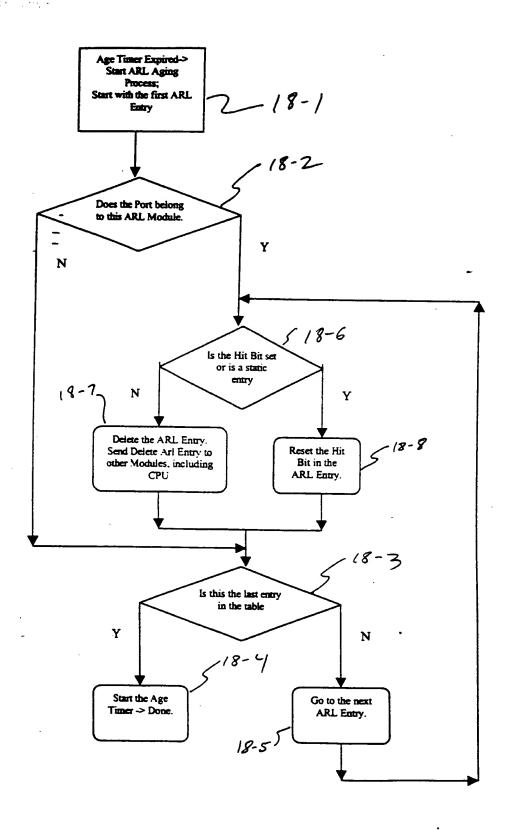


Fig. 18

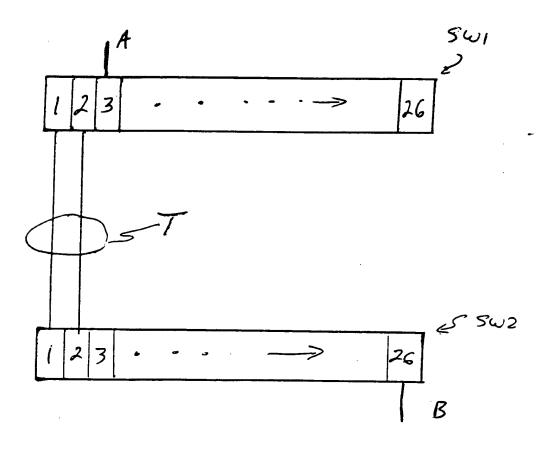


Fig. 19

Field	Header	Size	Offset For Ethernet II Untagged	Offset For Ethernet II Tagged	Offset For SNAP Untagged	Offset For SNAP Tagged
Destination Mac Address	Mac	6 Bytes	0	0	0	0
Source Mac Address	Mac	6 Bytes	6	6	6	6
Protocol Type	Mac	2 Bytes	12	16	20	24
Destination SAP	802.3	1 Byte	NA	NA	14	18
Source SAP	802.3	1 Byte	NA	NA	15	19
802.1p Priority	Mac	3 bits	NA	14	NA	14
VLAN Id	Mac	12 bits	NA	14+ 4b	NA	14+4b
TOS Precedence	IP	3 bits	15	19	23	27
Differentiated Services	IP	6 bits	15	19	23	27
Source IP Address	IP	4 Bytes	26	30	34	38
Destination IP Address	_ IP	4 Bytes	30	34	38	42
Protocol	IΡ	1 Byte	23	27	31	35
Source Port	TCP/ UDP	2 Bytes	34	38	42	46
Destination Port	TCP/ UDP	2 Bytes	36	40	44	48
TCP Control Flags (For aligning on Byte boundary 2 bits of reserved bits preceding this field is included)	TCP	1 Byte	47	51	55	59
Data at Offset 1	NA	8 Bytes	Data	Data	Data	Data
			Offset1	Offset1	Offset1	Offset1
			From	From	From	From
·		1	start of	start of	start of	start of
			IP / IPX	IP / IPX	IP./ IPX	IP / IPX
			Header	Header	Header	Header
Data at Offset 2	NA	8 Bytes	Data	Data	Data	Data
			Offset2	Offset2	Offset2	Offset2
			From	From	From	From
•			start of	start of	start of	start of
			IP / IPX	IP /IPX	IP / IPX	IP / IPX
			Header	Header	Header	Header
Data at Offset 3	NA	8 Bytes	Data	Data	Data	Data
			Offset3	Offset3	Offset3	Offset3
		•	From	From	From	From
			start of	start of	start of	start of
			IP / IPX	IP / IPX	IP / IPX	IP/IPX
			Header	Header	Header	Header
Data at Offset 4	NA	8 Bytes	Data	Data	Data	Data
			Offset4	Offset4	Offset4	Offset4
			From	From	From	From
			start of	start of	start of	start of
			IP /IPX	IP / IPX	IP/IPX	IP / IPX
			Header	Header_	Header	Header

FIGURE 20

Fy. 21a

Fig. 21b.

Fig. 21b.

Filter Mask Format:

Filter Enable (1b)	Counter (5b)	Rem Port	Output Mod	Output Port	TOS I		ı	Diff Serv (6b)		2.1p Prior (3b)
(,	()	(1b)	(5b)	(6b)						
NMA Enb (1b)	No Match Action (10b)	Data Offset 4 (7b)	Data Offset 3 (7b)	Data Offset 2 (7b)	Data Offset 1 (7b)	Po Ma	ress ort ask b)	Egree Mod Mas (5b)	ld k	Egress Port Mask (6b)
				Field Ma	sk					

Field Mask Format:

Dest	Src	Prot	Dest	Src	802.1	Vlan	TOS	Diff	Src	Dest	Prot	Src	Dest
Mac addr	Mac addr	type (2 B)		SAP (1 B)		Id (12b	Prec (3b)	Serv (6b)	IP addr		IP- (1B)	Port (2B)	Port (2B)
(6 B)	(6 B)		1	1	(3 b))	1		(4B)	(4 B)			

TCP Cntr Flags	Data 1 (8B)	Data 2 (8 B)	Data 3 (8B)	Data 4 (8B)
(1B)	(0D)	(O D)	(02)	

Address / parsing poclet to extract setelal fields Construct a field value Go thrugh all filters + opply mosk Concatenate musk results with filter number- generate search Key search rules table for sourch key match perform action as specified bound on match

12

	Count er (5b)	Output Mod (5b)	Output Port (6b)	TOS_ P (3b)	Diff Services (6b)	802.1p Priority (3b)	Actio ns (11b)	Filter Select (3b)	Ingres s Port (6b)	Egrs Mod (5b)	Egrs Port (6b)	Filter Value (512 b)
IJ									,			
H												

Fy. 23

DOSEMET LOSEDO

30 28	26	24	22	20	18	16	14	12	10	8	6	4	2	0
					Sou	ırce II	Add	ress				<u> </u>		
					Mult	icast]	P Ad	dress						
r						L3 Po	rt Bit	map						
					L3 I	Modu	le Biti	map		_				
		_	Un	used					7	TTI		So	urce P	ort

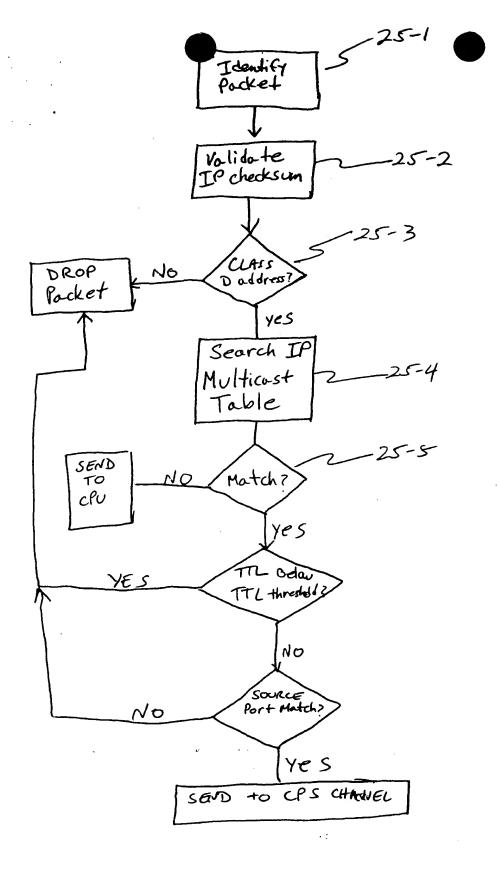
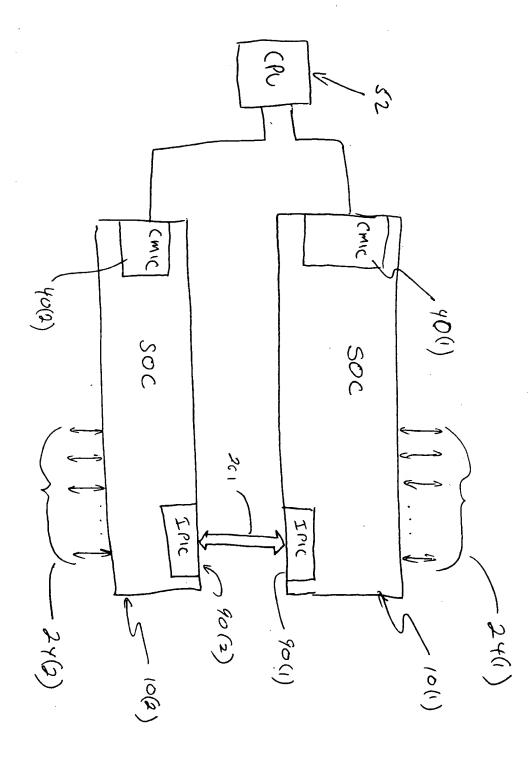
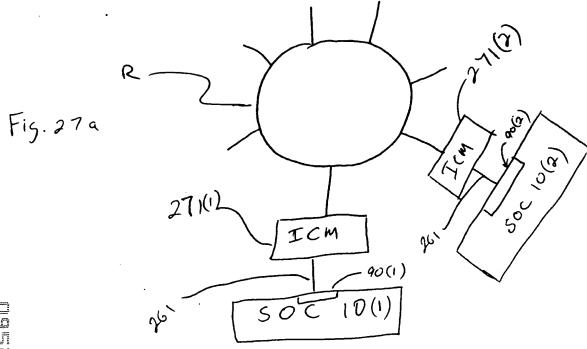


Fig. 25



TY 26 DESERTED DESERTED



271(2) 26 Fig. 215 2716) ICM 90(1) 261 SOC 10(1)

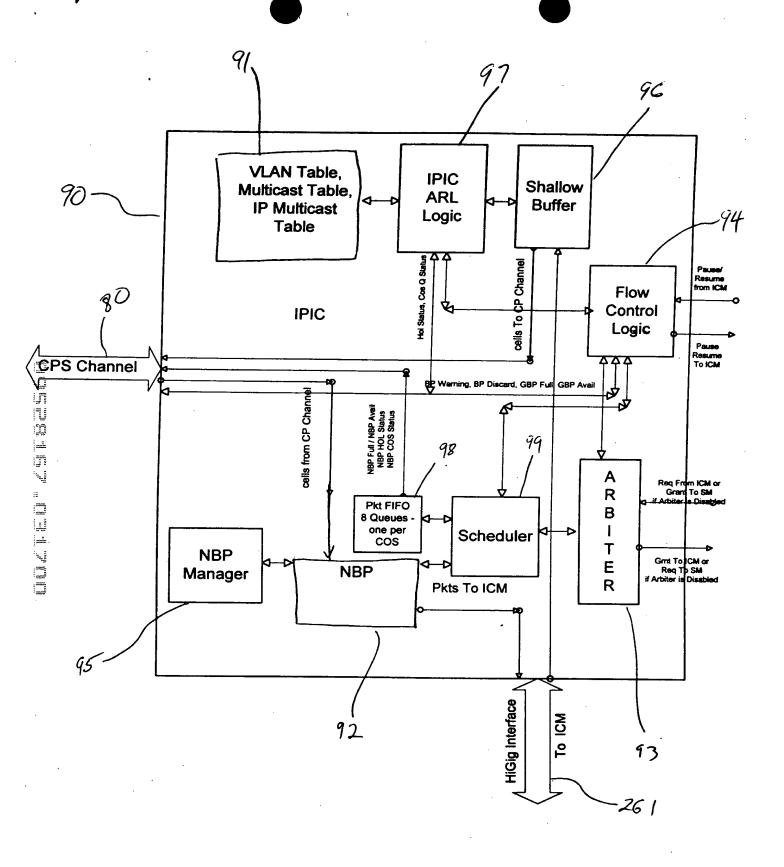
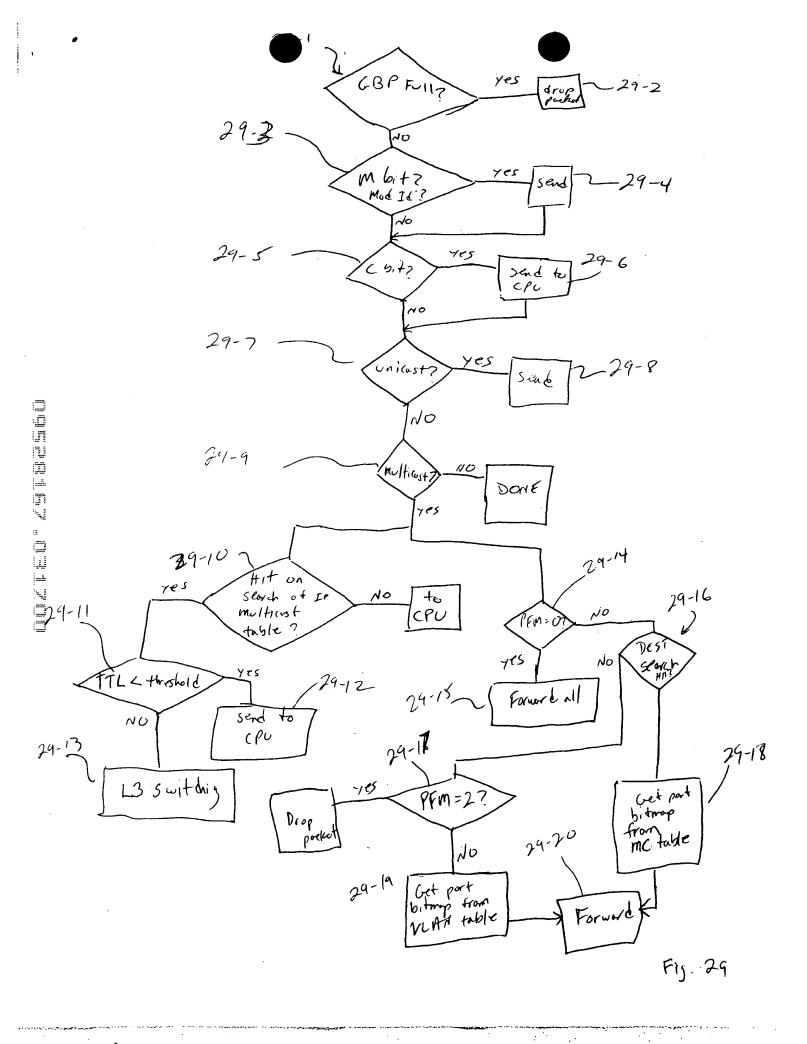


Fig 28.



COS Queue (3b)	C NCA P (2b) F	802.1p Priority (3b)	Rate Counter (8b)	Rate Counter Threshold (8b)	Rate Discard Thresho Id (8b)	New Code Point (6b)	New COS Queue (3b)	New 802.1 Priority (3b)
----------------------	----------------------	----------------------------	-------------------------	--------------------------------------	---------------------------------------	------------------------------	-----------------------------	----------------------------------

FIGURE 30

Offset Field	Offset 1	Offset 2	Offset 3	Offset 4
000	0-15	16-31	32-47	48-63
001	8-23	24-39	40-55	56-71
010	16-31	32-47	48-63	64-79
011	24-39	40-55	56-71	72-87
100	32-47	48-63	64-79	80-95
101	40-55	56-71	72-87	88-103
110	48-63	64-79	80-95	96-111
111	56-71	72-87	88-103	104-119

Figure 31

FIGURE 32

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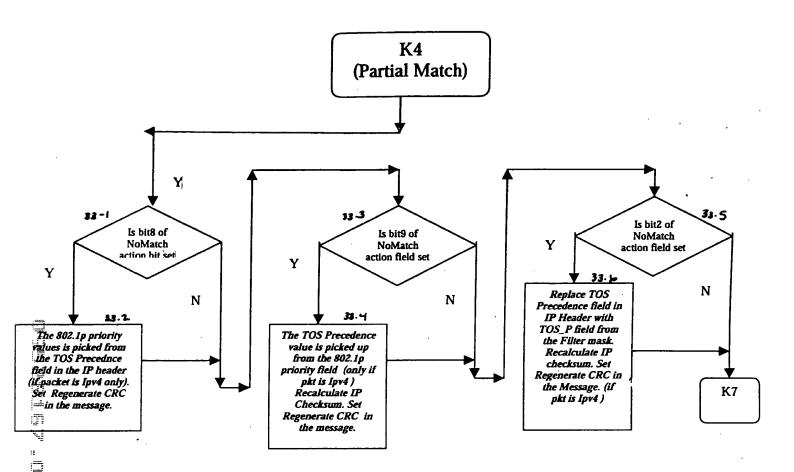


FIGURE 33

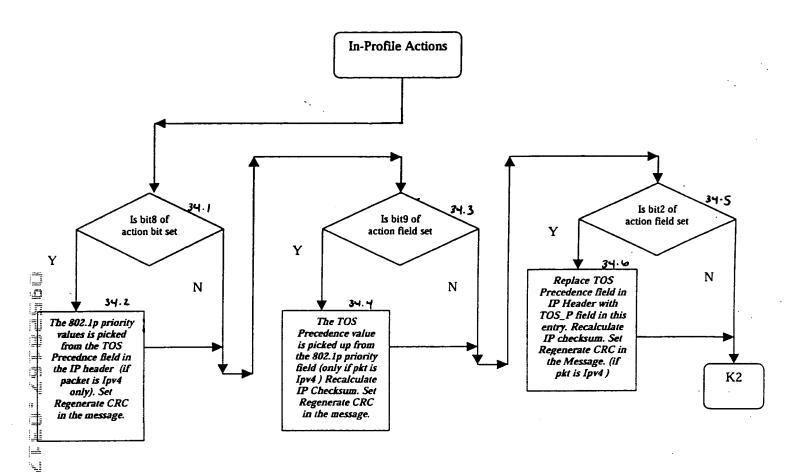
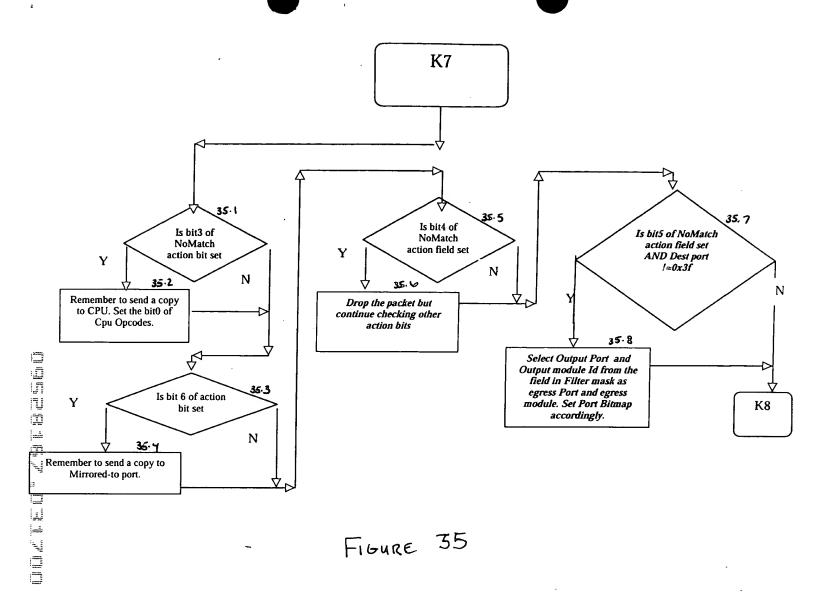


FIGURE 34



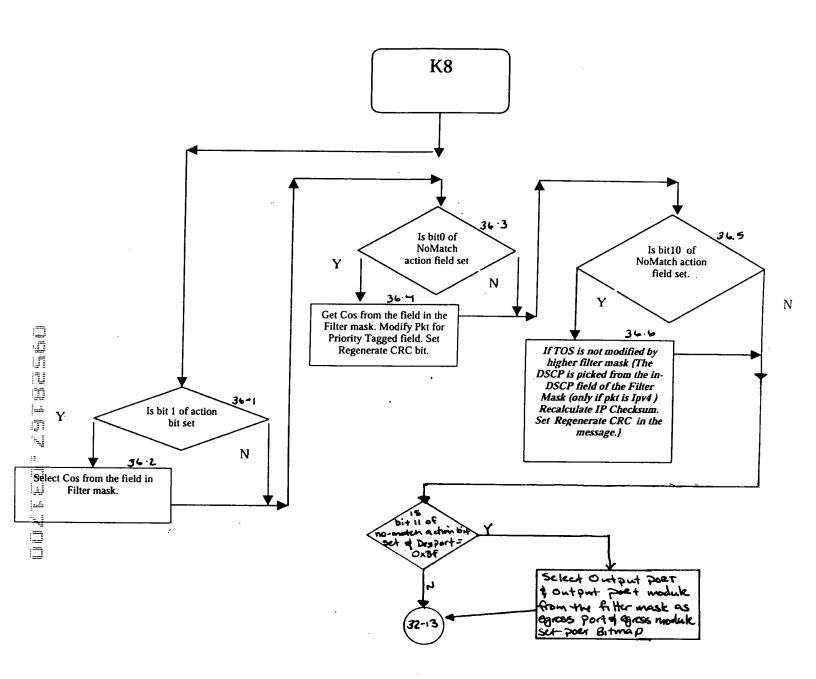
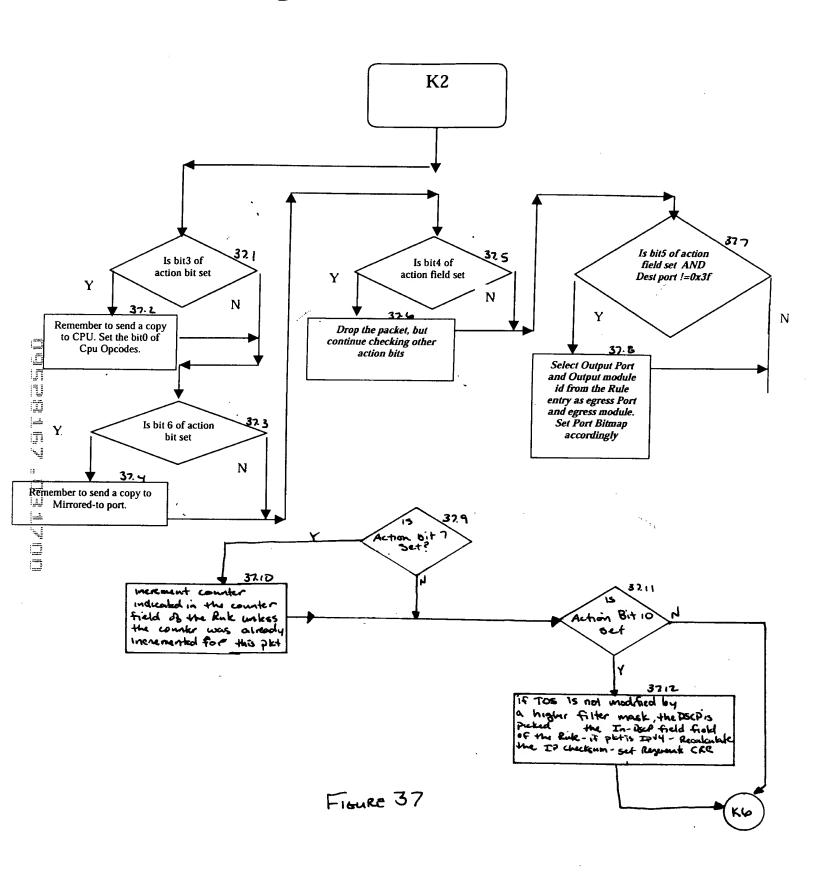


FIGURE 36



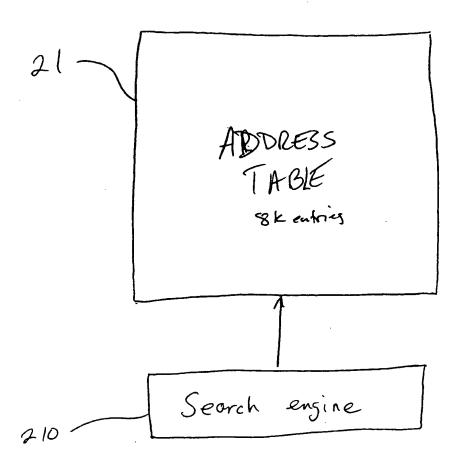


Fig 38

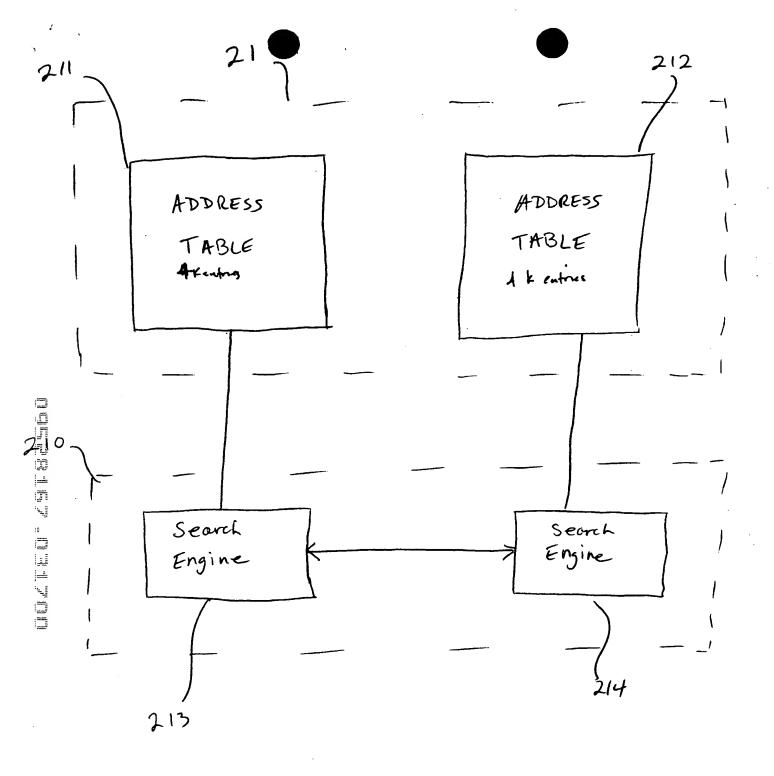


Fig. 39

. . . .

Figure

212

entry

AFABZXVTRPN LJHFD

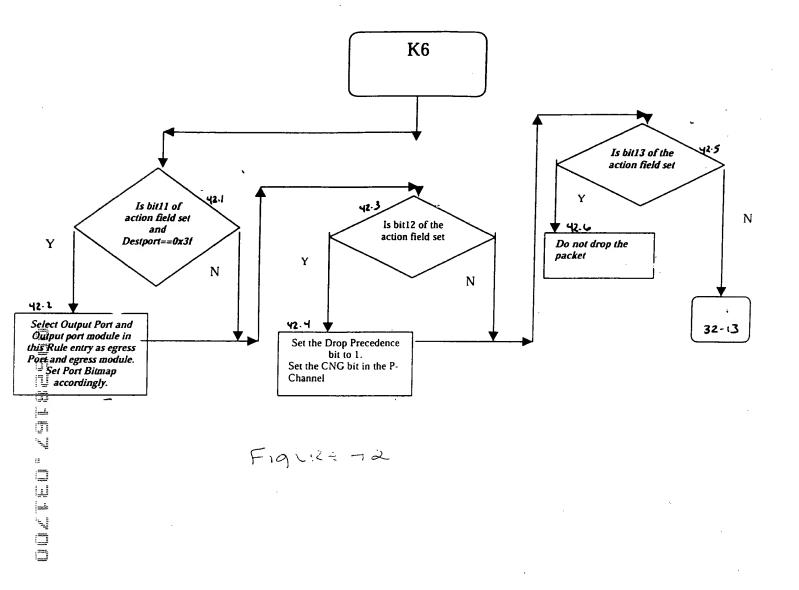
Figure 4/a

•	address	entry
	31	NN
	30	ММ
21	29	11.
	28	кк
	28 27	LL
	26	GH
	25	CF
	25 24	EE BE BE BE BD
	23	BE
	23 22	BD
	21	BC
	21 20	BA
	19 18 17 16 15 14 13 12 11	AC
org	18	AB
մեւու ումե վե վեռի կատ ուսեվ պետի հետի	17	AA
· · · · · · · · · · · · · · · · · · ·	16	Y
i f	15	×
:: :-	14	Y
- 4	13	T
-	12	S
į	11	R
	10	Q
3	9	N
=	8	M
i.		L
j	و	`.
- - -	5	
भवते प्रतान विक्रम हिर्म पुरान विक्रम	9 8 7 6 5 4 3 2 1 0	BA AB AY XVTSRQNMLKJGEDCB
_	3	
	4	
•	ام	B
	L	<u>-</u> 9

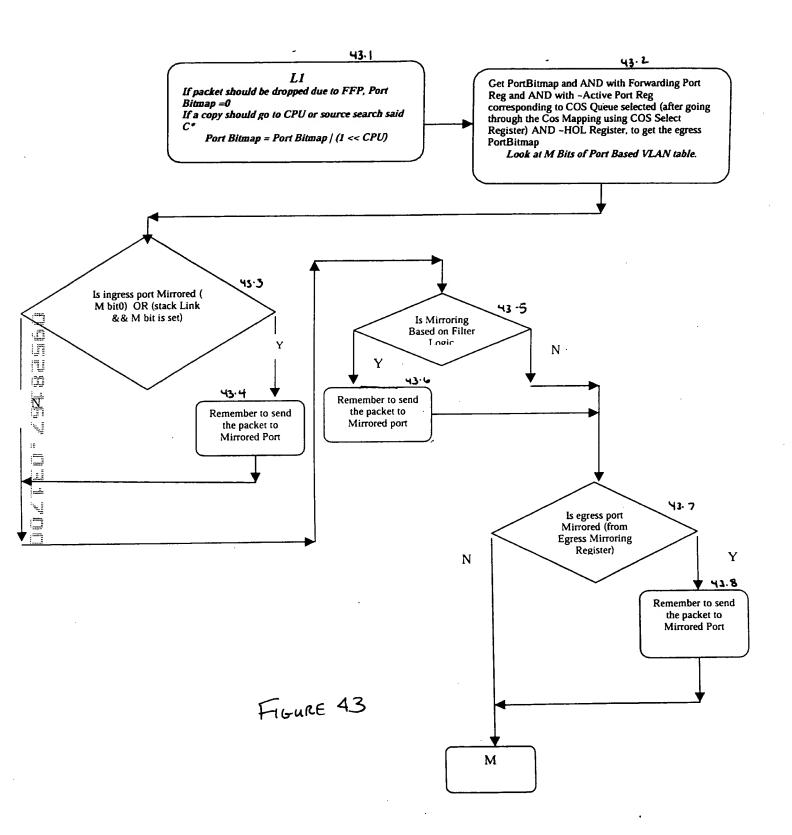
	211
address	entry
30	MM
28	KK
26	GH
24	CC
26 24 22 20	CC BD BA AB
20	BA
18	AB
16	Y
14	V
12	S
10	Q
8	M
6	K
4	YVSQMKGD
14 12 10 8 6 4 2	B
<u> </u>	

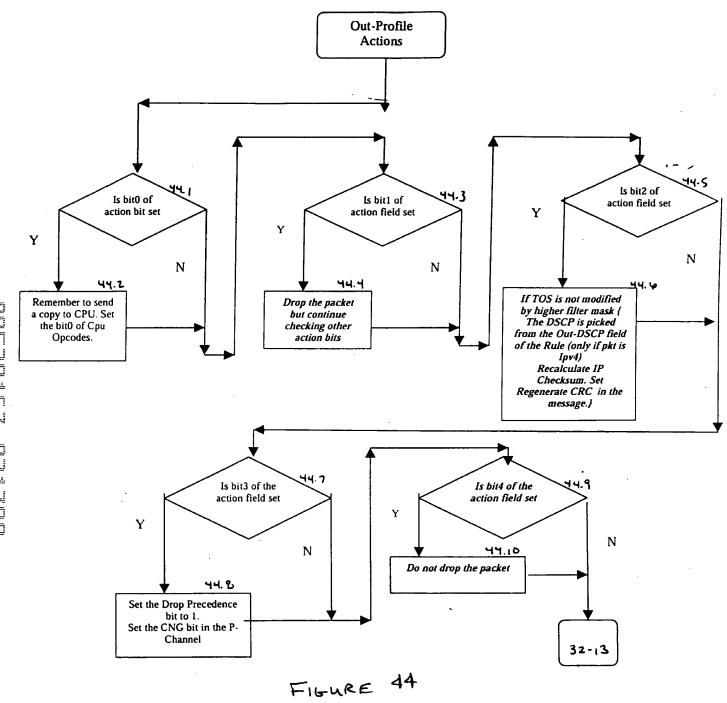
/		
address	entry	
31	NN	
31 29 27 25 23 21	LL	
27	JJ	
25	CF	
23	BE	
21	BC	
19	AC	
17	AA	
15	X	
13	T	
11	R	
9	N	
7	L)	
11 9 7 5 3	NL J C B C C A X T R N L J E C	
3	E	
1	C	

Fig 414



2...





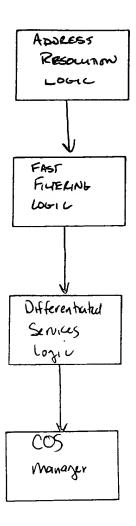


FIGURE 45

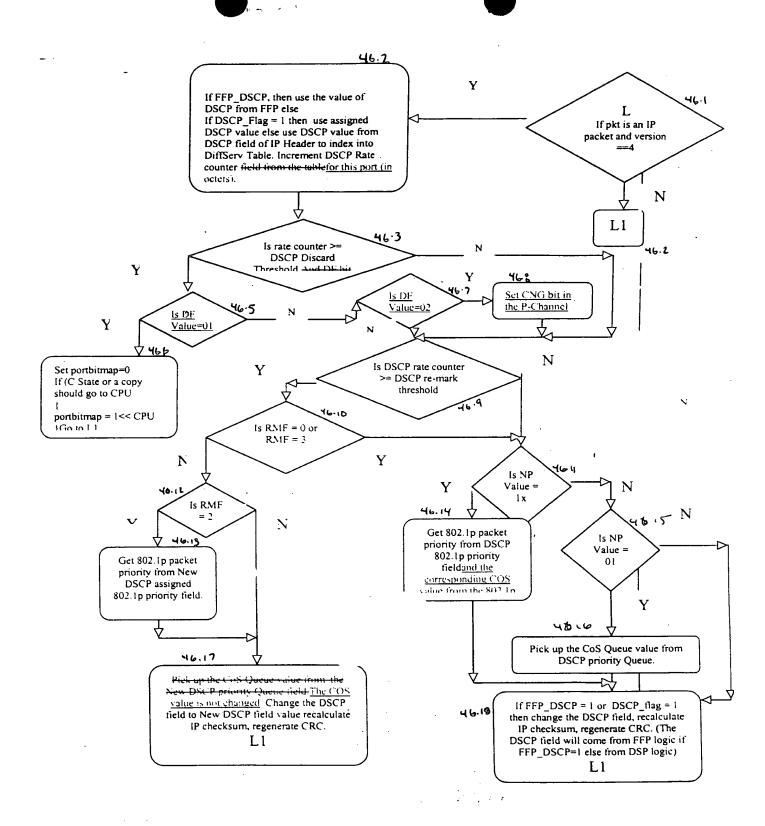
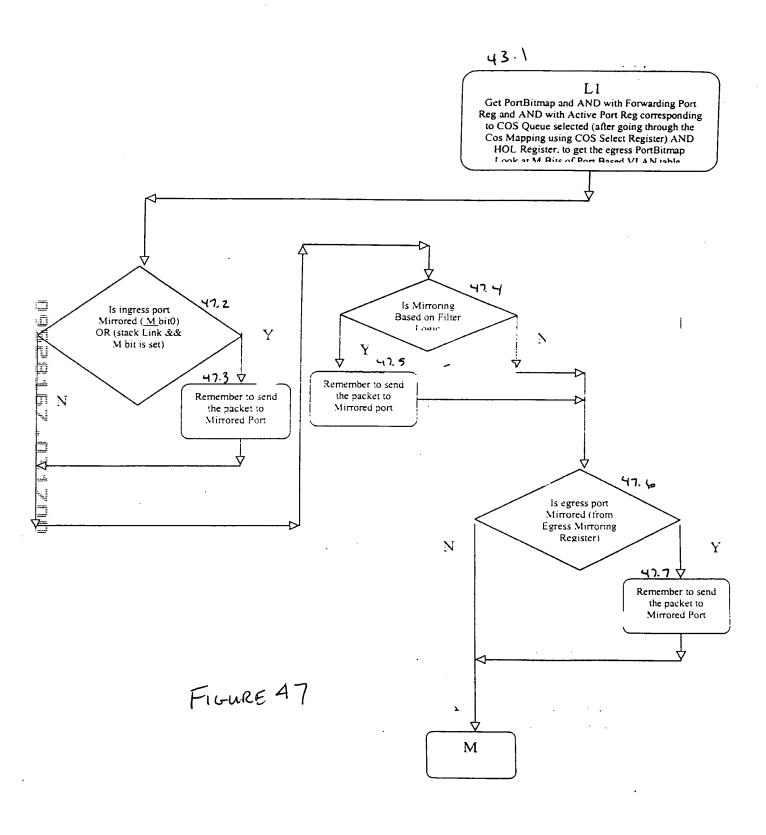
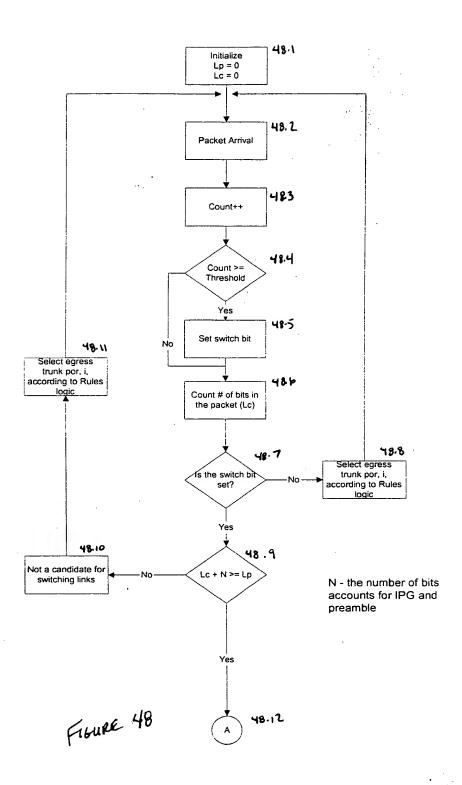


FIGURE 46





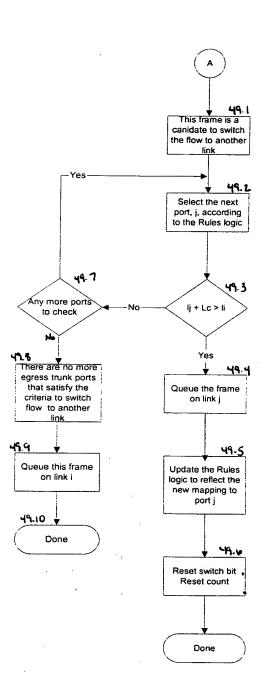


FIGURE 49

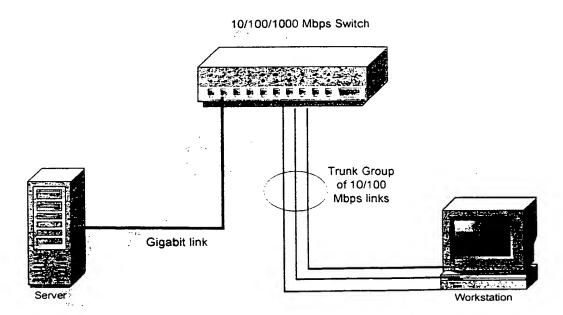
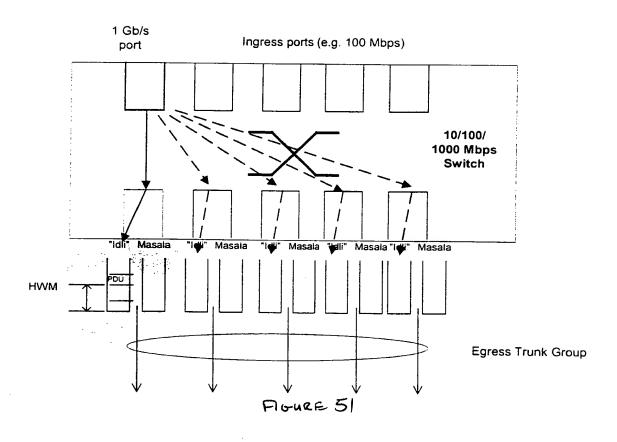


FIGURE 50



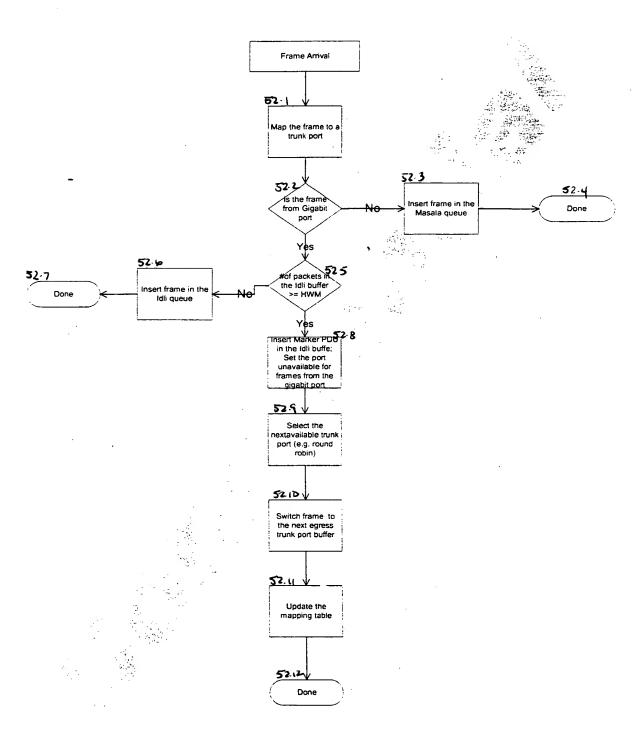
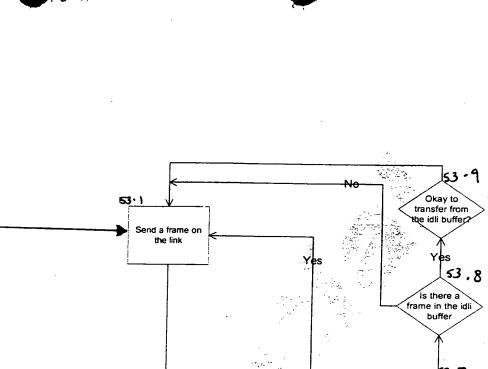


FIGURE 52



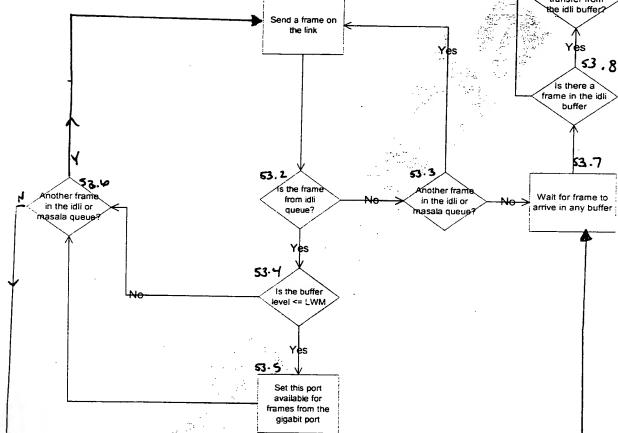


FIGURE 53

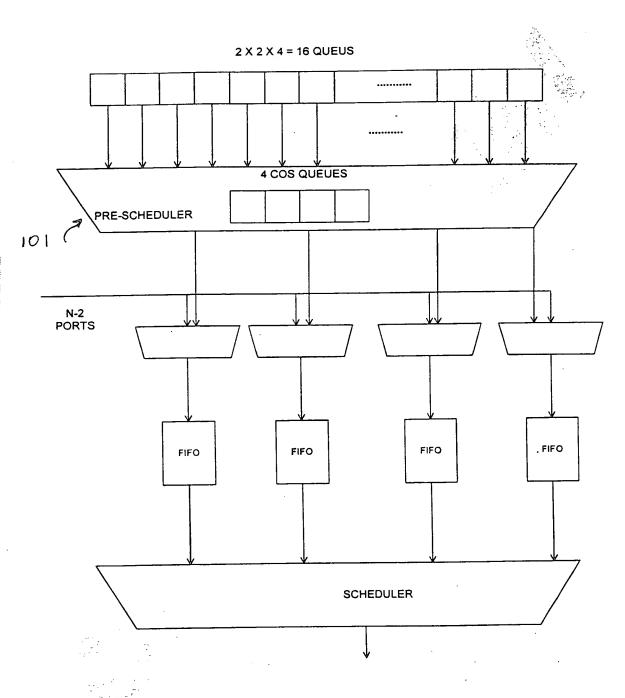


FIGURE 54

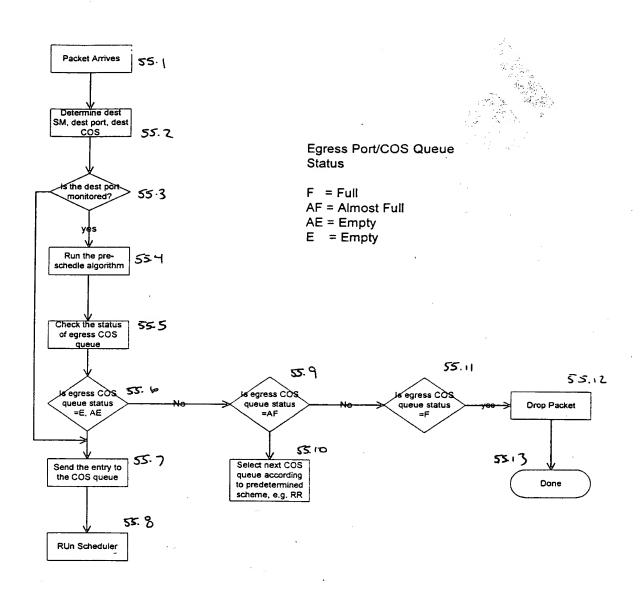


FIGURE 55

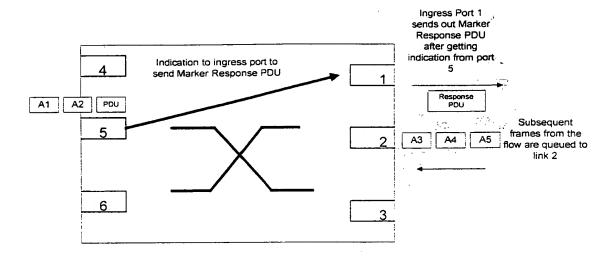


FIGURE 56